# VZDU # 38 SEPT/OCTOBER 1992

## DOWN UNDER CLUB


Editor
Harry Huggins
12 Thomas Str.
Mitcham. 3132
03-873-1408

Treasurer
Ron Allen
2 Orlando Str.
Hampton. 3188
03-598-4534


Again I have to say a few words, and I have a few words to say.

I am very pleased to announce that my pleas for material have been answered to a limited extent. There is pleanty of room for all you others to grab a page or two (or three).

Peter Ross has come up with an original concept in Mystery Game Writing. Makes it as simple as filling out a Tax Return.( !!! ). I have had to print both parts in one issue, as I don't like having to wait 2 months for part 2, and one part was no use without the other. And as a bonus I have included his graphic notion to finish it off. That will give you pleanty of typing to do for a while. He probably has other goodies in store, as he has collected a whole file of Mystery games from the library. Thanks Peter.

Inside you will find the next entry in our competition. Don't just say 'Oh, just another map.' Study it and you will find there is quite a lot of programming effort been put into it. It came close to winning. I'd say, if it had been in color with state borders it would have won. I can't say, as I kept out of the judging in case of a tie, when I could have had a casting vote.

Also for those using VZBASCOM and having difficulties, there is a Modification for you to incorpate. You can use a Monitor, the Disk Doctor or simply POKE. If you use the latter, PEEK the addresses first to make sure you have the right ones.

And for Action Game you may remember that VZ USER published half a game and quit. The next 2 issues will have the complete game in them. It is a race game written in Machine Code so will have fast action. We have to thank Peter Hichman for this contributation. David Wood has shown an interest so we may get some good guidelines from him about using machine code in games.

Harry

# Another COMPETITION ENTRY

```
5 REM BASIC AUSMAP
6 REM A.V.B (BERT) BRIMBLE
7 REM 1-3-91 TO  1-3-92
10 MODE(1):COLOR2,0
20 FORX=28960TO30334:READA:POKEX,A:NEXT
600 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,85,84,0,0,1,80,0,0,0,0,0,0,0
610 DATA0,0,0,0,0
620 DATA0,0,0,0,0,0,0,0,0,0,0,0,1,85,85,85,0,1,80,0,0,0,0,0,0
630 DATA0,0,0,0,0,0
640 DATA0,0,0,0,0,0,0,0,0,0,0,0,5,85,85,84,0,5,80,0,0,0,0,0,0
650 DATA0,0,0,0,0,0
660 DATA0,0,0,0,0,0,0,0,0,0,0,85,21,85,85,80,0,5,84,0,0,0,0,0
670 DATA0,0,0,0,0,0,0
680 DATA0,0,0,0,0,0,0,0,0,0,1,85,85,85,85,64,0,5,85,0,0,0,0,0
690 DATA0,0,0,0,0,0,0
700 DATA0,0,0,0,0,0,0,0,0,0,5,85,85,85,85,80,0,5,85,64,0,0,0,0
710 DATA0,0,0,0,0,0,0
720 DATA0,0,0,0,0,0,0,0,0,0,85,85,85,85,85,85,0,5,85,80,0,0,0
730 DATA0,0,0,0,0,0,0,0
740 DATA0,0,0,0,0,0,0,0,0,1,85,85,85,85,85,85,80,5,85,84,0,0
750 DATA0,0,0,0,0,0,0,0,0
760 DATA0,0,0,0,0,0,0,0,0,5,85,85,85,85,85,85,85,85,85,85,0
770 DATA0,0,0,0,0,0,0,0,0,0
780 DATA0,0,0,0,0,0,0,0,0,21,85,85,85,85,85,85,85,85,85,85,0
790 DATA0,0,0,0,0,0,0,0,0,0
800 DATA0,0,0,0,0,0,0,0,0,85,85,85,85,85,85,85,85,85,85,85,64
810 DATA0,0,0,0,0,0,0,0,0,0
820 DATA0,0,0,0,0,0,0,0,5,85,85,85,85,85,85,85,85,85,85,85,80
830 DATA0,0,0,0,0,0,0,0,0,0
840 DATA0,0,0,0,0,0,0,0,85,85,85,85,85,85,85,85,85,85,85,85,84
850 DATA0,0,0,0,0,0,0,0,0,0
860 DATA0,0,0,0,0,0,0,5,85,85,85,85,85,85,85,85,85,85,85,85,85
870 DATA0,0,0,0,0,0,0,0,0,0
880 DATA0,0,0,0,0,0,5,69,85,85,85,85,85,85,85,85,85,85,85,85
890 DATA85,64,0,0,0,0,0,0,0,0,0
900 DATA0,0,0,0,0,0,5,85,85,85,85,85,85,85,85,85,85,85,85,85
910 DATA85,80,0,0,0,0,0,0,0,0,0
920 DATA0,0,0,0,0,0,5,85,85,85,85,85,85,85,85,85,85,85,85,85
930 DATA85,84,0,0,0,0,0,0,0,0,0
940 DATA0,0,0,0,0,0,5,85,85,85,85,85,85,85,85,85,85,85,85,85
950 DATA85,85,0,0,0,0,0,0,0,0,0
960 DATA0,0,0,0,0,0,5,85,85,85,85,85,85,85,85,85,85,85,85,85
970 DATA85,85,64,0,0,0,0,0,0,0,0
980 DATA0,0,0,0,0,0,5,85,85,85,85,85,85,85,85,85,85,85,85,85
990 DATA85,85,80,0,0,0,0,0,0,0,0
1000 DATA0,0,0,0,0,0,85,85,85,85,85,85,85,85,85,85,85,85,85,85
1010 DATA85,85,84,0,0,0,0,0,0,0,0
1020 DATA0,0,0,0,0,0,21,85,85,85,85,85,85,85,85,85,85,85,85,85
1030 DATA85,85,84,0,0,0,0,0,0,0,0
1040 DATA0,0,0,0,0,0,5,85,85,85,85,85,85,85,85,85,85,85,85,85
1050 DATA85,85,84,0,0,0,0,0,0,0,0
1060 DATA0,0,0,0,0,0,1,85,85,85,85,85,85,85,85,85,85,85,85,85
1070 DATA85,85,84,0,0,0,0,0,0,0,0
1080 DATA0,0,0,0,0,0,0,85,85,85,85,85,85,85,85,85,85,85,85,85
1090 DATA85,85,84,0,0,0,0,0,0,0,0
1100 DATA0,0,0,0,0,0,0,21,85,85,85,85,85,85,85,85,85,85,85,85
1110 DATA85,85,80,0,0,0,0,0,0,0,0
1120 DATA0,0,0,0,0,0,0,5,85,85,85,85,85,0,85,85,85,85,85,85,85
```

```
1130 DATA85,64,0,0,0,0,0,0,0,0
1140 DATA0,0,0,0,0,0,0,0,5,85,85,85,85,0,0,5,85,85,85,85,85,85
1150 DATA85,0,0,0,0,0,0,0,0,0
1160 DATA0,0,0,0,0,0,0,0,5,85,85,85,64,0,0,1,85,21,85,85,85,85
1170 DATA84,0,0,0,0,0,0,0,0,0
1180 DATA0,0,0,0,0,0,0,0,21,85,85,84,0,0,0,0,84,85,85,85,85
1190 DATA85,80,0,0,0,0,0,0,0,0,0
1200 DATA0,0,0,0,0,0,0,0,21,85,80,0,0,0,0,0,17,21,85,85,85,85
1210 DATA64,0,0,0,0,0,0,0,0,0
1220 DATA0,0,0,0,0,0,0,0,1,85,0,0,0,0,0,0,1,69,85,85,85,85,0
1230 DATA0,0,0,0,0,0,0,0,0
1240 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,85,85,85,85,0,0,0
1250 DATA0,0,0,0,0,0
1260 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,85,85,85,84,0,0,0
1270 DATA0,0,0,0,0,0
1280 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,21,85,85,84,0,0,0
1290 DATA0,0,0,0,0,0
1300 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,85,5,80,0,0,0,0
1310 DATA0,0,0,0,0
1320 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
1330 DATA0,0,0,0,0
1340 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
1350 DATA0,0,0,0,0
1360 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,5,84,0,0,0,0,0
1370 DATA0,0,0,0,0
1380 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,5,84,0,0,0,0,0
1390 DATA0,0,0,0,0
1400 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,5,84,0,0,0,0,0
1410 DATA0,0,0,0,0
1420 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,80,0,0,0,0,0
1430 DATA0,0,0,0,0
1440 DATA0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
1450 DATA0,0,0,0,0
3010 FORX=28672TO28703:POKEX,85:NEXT
3020 FORX=30688TO30719:POKEX,85:NEXT
3030 X=0:Y=1:B=0
3040 FORA=1TO62:SET(X,Y+B):B=B+1:NEXT
3050 X=127:Y=1:B=0
3060 FORA=1TO62:SET(X,Y+B):B=B+1:NEXT
4000 COPYA:'CRUN:'CRUN FOR ONE COPY & RUN FOR CONTINUOUS.
8000 GOTO8000
```

# GAMES COLUMN

GREAT!!! I have a letter sent to me about the last Game's Column AND I have a CHALLENGE!!!!! After the letter I will try to answer Peter Watson's questions and also answer his chess question from last time.

***Mail bag: Peter Watson *****

Dear Tim.

I read your comments in the Games Colum of VZDU37 with much interest. Yes, I admit you are right, I do spend quite a lot a time playing each of the games that I sent in a High Score for.

I think that the addition of the challenge column column makes the High Score Table more confusing.

I know how difficult it is to classify a game as Easy or Hard. Ever since getting the VZ I have always written down my personal high scores in every game. Comparing the current best with the score achieved on the first day of play gives an idea of how easy it is to continually improve on your score.

A player who perseveres with Galaxon, Kamikaze and Lunar Lander should be able to greatly improve on their score, while soneone playing Hamburger Sam might find it very difficult to keep breaking their own scores. Of course, this may not be true for everyone, and the game you play the most will be the one that you will get better at.

What's this about needing two witnesses?

I intend to send some high scores to Harry, so I challenge you or any other club members to beat them.

I was surprised that nobody else sent in scores of their own. Tell them to get a wiggle on. I want to see what the other members are capable of.

I have a big question for you. How could you use the joysticks for Defence Penetrator? The one on Tape 4 only works on keyboard. Also, what happens after you complete stage 6? Does the game start from the beginning again?

I haven't had much time to spend on the VZ lately, but I'll continue to show an interest in the games column for as long as I'm in the club.

Okay, I think that's all I have to say for now. I look forward to the next games column, and the other entries in the design competition.

Yours Sincerely,

Peter Watson.

***Mail Bag: Peter Watson*****

Well before I start to answer all of Peter's questions, I would like to thank him. Although I am considered the Games Colunmnist I am in fact only a person who fills in the gap of the games section of the newsletter, if you send me a letter then I have less to worry about for the next newsletter and this makes the column work alot better. So, THANK YOU PETER WATSON.

High scores:

AH? Now you've got ME confused. The first column is the high scorers name, the second column is the All-Time high score. Hint: The All-Time high that have your name (Peter) beside them are the ones you're barred from. (I think!) (Am I right, Harry?)

"What's this about .... two witnesses?" Well, when I started playing for the High Scores Harry informed me about the rules and one of them was that you need two witnesses.

It's good to have a person to challenge. True, the members do need to get a wiggle on but I am not the one that will get them moving. They have to do that themselves. I hope other members take your challenge and give it " a good shake of the stick" (I hope that's the right saying, I'm not too good at remembering sayings). I for one will take up the challenge and try and give you a hard task.

The big answer to the big question. About the time I did the Three Reviews I heard about a program that puts joysticks on a keyboard only game. It turned out that a friend had the program with Defence Penetrator, but it was on tape and it did not work properly. A few weeks later he had it on disk and it worked. In the excitement I forgot who sent it and believed that Harry had a copy. (I assume too much sometimes.!) Any way I will send Harry a copy of this programe and Harry will do what he thinks best. After the sixth stage in Defence Penetrator the game goes back to the beginning. A big hint here if and when you get to the sixth stage, make sure you hit the alien space craft or you end up in a tunnel with no way out.

Harry's answer to the chess question:

Levels 1-2-3 are for playing. Level 4 I don't know. Levels 5-6 are for problem solving. They may take up to several hours to make a move.

No review this column. I seem to be running out of time lately.

TIM.

# THE HIGH SCORES

I've been hauled over the coals being blamed for making a mess of the HIGH SCORES. Well I don't think it is a mess!

First I did male a mistake in ASTEROIDS. The ALL TIME HIGH should have been 110000 and not 11000. Hence Tim has not set a new high.

Now we look at the rest. The left 4 columns are the same as always. They will record your bi-monthly high scores. The next column is a record of the highest scores obtained published in any VZ magazine. Are for reference only. The next column (challenge) is the highest score that a person named has achived. If a name is not shown, then that score was set by someone in another club, or is no longer a member in ours. If a person is named, then that person cannot compete in the bi-monthly "RAT RACE", unless their score is topped. He/she may still attempt to top the all time high, and the score will show in the challenge column. Also Paul and Peter can still compete in games that do not have their name in the right most column.

If the rightmost columns confuses you, just lay a sheet of paper over them and don't read them. The left columns are the same as you always had. However as I have not received any further scores I need not reprint them this issue.

Instead I'll use the space to add to Tim's column.

The original rules, before I became Editor was that any High Score had to have 2 witnesses. I have not bothered about it, though we did have a cheat in a while ago. There are several ways of cheating. One by giving any score that comes to mind. In Dawn Patrol there is a simple way to get a million or more, that will show on the score pad. It's just a matter of how long you can spend to hold a key down. In Basic games it's easy to list the program and alter what will be paid for any item. Something that counts as one, make it ten. ( Or 100).

The EASY/HARD rating is generally done by the programmer when writing it, and is attained by alteration of speed, or lives or in what facilities are available. As in Hamburger Sam, the amount of Pepper you get, or how many Gremlins are about or what you are paid for each Hamburger. Take Super Snake. In level 1 you could play all day. I've never seen a score in Level 10. It's not a matter if you find it hard, but set levels in the program. I find them all hard!

Tim has sent me the Joystick version of Defence Penetrator. I will put it on a library disk. In the meantime if someone wants it, send me a disk or tape and return postage and I'll put it on for you. It is Machine code and you just can't add to it. However for Basic programs, I'll print the alterations needed in the next issue. It is only a matter of about 10 lines.

# MODIFICATION TO STACK POINTER IN

# VZBASCOM

by BOB KITCH DEC 1991

A problem with the STACK POINTER has been discovered in VZBASCOM.

After a program has been compiled the STACK POINTER area is overwritten and the compiled program will not run. Short programs do notoverwrite this are , and they perform satisfactorily. Longer programs will cause the error - and usually result in a system reset.

A fix is outlined herein that can be carried out with a suitable monitor program. The DISK SECTOR EDITOR of DISK DOCTOR in the DISK TOOL KIT is also suitable to change the couple of bytes.

In the original version the following disassembly applies

```
B523   ED 73 F8 F6      LD ( F6 F8 ) SP
B527   ED 7B F8 F6      LD SP (F6 F8)
B52B   CD 56 B5         CALL 6556
B52E   21 .....
```

This should be changed to

```
B523   31 A3 A1 00      LD SP, A1A3
B527   ED 73 F8 F6      LD (F6F8), SP
B52B   CD 56 B5         CALL B556
B52E 21 ......
```

tHE BYTES TO BE CHANGED ARE

```
B523   ED  TO  31
B524   73  TO  A3
B525   F8  TO  A1
B526   F6  TO  00
B527    NO CHANGE
B528   78  TO  73
```

This should overcome any problems with VZBASCOM. NO other problems have been drawn to my attention.

# INSTRUCTIONS FOR ADVENTURE BASE

By PETER ROSS

Have you ever wanted to write your own adventure programs, but is shocked by the amount of programming needed to get the game off the ground? Well relax. I have come up with a program that does about 99% of all this for you. It's called 'ADVENTURE BASE'. All you have to do is enter in some information about how you want your program to turn out, which is all explained later. But for now you'll have to get ADVENTURE BASE into your computer. So do that and come back to the article when you've finished.

O.K. You have got ADVENTURE BASE into your computer. Make sure that you have it saved before you enter in any of your own information so that later on you can use it again for another game that you might want to make. Note that I have already entered a demonstration program into ADVENTURE BASE. It's name is "The HAUNTED CASTLE of KRILE". It's quite simple to get to the end, but it gives you a simple demonstration of what ADVENTURE BASE can do. Now you need to draw up the base map for the adventure that is going to be made. Put in all the room discriptions, treasures/items and a number for each room, starting at 1 and going from left to right. If you don;y know what a base map is then refer to David Woods 'HOW TO CREATE ADVENTURE PROGRAMS' in issue 27 of the VZ DOWN UNDER GROUP'S BIMONTHLY NEWSLETTER/ MAGAZINE.

THE TRAVEL TABLE.
By now you have drawn up your map.(Don't forget to onclude a few tricky puzzels to make the game more interesting), and are wanting to feed this information into the adventure base. To do so you will need to draw up a TRAVEL TABLE looking like this:

ROOM NO NORTH SOUTH EAST WEST

With numbers you wrote in each room on the map, write them in assending order going downwards in the ROOM No, section. Say room no.2 is the "magicain's quarters. Exits lead north, south and east". In this case if you went north it would lead you into room 1

Going south would lead you into room 4. Going east would lead you into room 3 and if you decided to go west you would crash into a wall, and a message would come up saying" WHO DO YOU THINK YOU ARE TRYING TO WALK THROUGH WALLS!". The base map forthis little game would be this:

| | |
|---|---|
| room No,1 | xxxxxxxxx xxxxxxxxx |
| magician's room No.2 | room No,3 |
| room No.4 | xxxxxxxxx xxxxxxxxx |

Below is the travel table for the base map I just talked about. Notice and tahe good look at the travel table. Without the travel table an adventure game would be so easy because there would be no walls stopping you from going any place, where with a travel table would be a very complex place to get to. The travel table for the adventure above:

| ROOM NO. | NORTH | SOUTH | EAST | WEST |
|---|---|---|---|---|
| 1 | 0 | 2 | 0 | 0 |
| 2 | 1 | 4 | 3 | 0 |
| 3 | 0 | 0 | 0 | 2 |
| 4 | 2 | 0 | 0 | 0 |

Once you have completely written out your own travel table you will need to enter it into the adventure base program. It is done like this. XXXX DATA 0,2,0,0. Notice that the four numbers here are the same four numbers written in my travel table in the first row. (Except the numbers under the heading ROOM No. because they are only there for reference so you know what order to put the data in when entering it into the program.) The XXXX stands for the line number. You will enter the information of the travel table in assending order starting at line number 4370. ADVENTURE BASE in it's present form can hold up to 16 rooms, but if you are desperate for more, later on in this article I will show you one way of doing it.

THE VOCABULARY.

There are only a few simple words the ADVENTURE BASE knows. They are :. GO, RUN, MOVE followed by a direction. ie NORTH, SOUTH, EAST, WEST.

GET, TAKE, LIFT followed by the name of an object. You can hold up to 5 objects but this can be change by changing line 1250 into:1250 IF FLAG = 5 THEN PRINT"ALL HANDS ARE FULL": GOTO 80 'change the 5 to suit. DROP, LEAVE followed by the name of an object. Each room can hold up to a total of 3 objects but this can be changed. NOTE. It is harder to change this than it is to change the TAKE LIFT routine.

INVENTORY.. List all of your treasures / irems, score and the total of all treasures /items in DOLLARS. QUIT. For those wimps out there that need to end the game before going to the end.

HELP. Doesn't do much good in the present form of ADVENTURE BASE but you can add some real if you like.Also if you're making a proper HELP command add a cost for it $$$.

You can add additional vocabulary words. Put these in lines 860 to 950 and your new commands can be acted on in lines 2700, 2730, 2770, 2810 and 2850.

ROOM DISCRIPTIONS are eneterd using the "PRINT" command. You must enter the exits along with the room discriptions. Lines for entering room discriptions start at line 3090. To add more rooms you will have to do this:ADD on more travel table data at the end of lines 4520 upward. Change the 16 in line 3960 to the number of tooms you are going to have after completing the proceedure of adding on more rooms. Change the 16 in line 4100 to the number of rooms you are going to have after completing the procedure of adding on more rooms. Add some line after line 3070 saying--IF RO= & THEN GOSUB @ "&" means the new room numbers you are going to have. "@" means the line in which you are going to write the room discription for. Don't forget to put a RETURN after each new room discription. If your starting room is different to 9 then change the 9 in line 4050 to the starting room number. Also if your finishing room number is different to 16 then change the 16 in line 110 to the finishing room number.

TREASURES AND ITEMS.

There are 7 treasure / items in the ADVENTURE BASE program. You can change these to whatever you fancy. Also you will need to change the number at the end of each object data line, because it stands for the value of each object before it. The treasure / item data is at the very end of the program. It starts at line 4540 and ends at line 4600. To place a certain item or treasure in a certain room you will have to alter some of the programming from lines 4190 and downwards. This is what you will need to : Change each line below line 4190 to this-- XXXX a(@,5)= &. The XXXX stands for the lines below 4190 "#" means the room that you are going to place the item or treasure "&" means the items or treasure numbers. The item / treasure number starts at one and goes to seven in the order you placed your object data. Example---The first item in the object data is a GOLD AXE. You need to have it in room 11 because it suits the room discription, so line 4190 would be--4190 A(11,5)=1

FURTHER IDEAS

Things can happen at random using the "RND(X) command like having a painting slideing from a wall. This would not kill the player but use up some of his strength. The strength variable is ST.

SOUND EFFECTS so the game seems more life-like.

FRIENDLY and UNFRENDLY encounters that give you information or use up your strength, like having an arm wrestle or something like that.

A GRAPHICAL ending instead of the boreing story. You could draw (SET) the player releasing a WICKED SPELL.

# ADVENTURE BASE

```
10 REM     ADVENTURE-BASE 16R
20 REM ************************
30 REM *    BY PETER ROSS      *
40 REM *FOR VZ300/200    1992 *
50 REM ************************
55 CLS:PRINT:PRINT"  THE HAUTED CASTLE OF KR
ILLE "
56 PRINT"          BY PETER ROSS
60 GOSUB3950:REM INITIALISE
70 REM ***********************
80 REM REPORT TO PLAYER
90 REM
100 PRINT" ==================================== ";
110 IFRO=16THENQU=1:GOTO2950
120 REM ***********************
130 GOSUB3060:REM ** ROOM DESCRIPTIONS **
140 REM ** NEXT LINE ACTIVATED IF OBJECT IN
ROOM **
150 IFA(RO,5)<>0ORA(RO,6)<>0ORA(RO,7)<>0THEN
GOSUB3850:REM OBJECT
290 PRINT"YOUR STRENGTH IS:"ST"%""
300 IFST<0THEN320
310 GOTO500
320 CLS:PRINT" UNFORTUNATLY YOU ARE EXHAUSTE
D"
325 PRINT"   SO THIS ADVENTURE MUST END
330 PRINT"     BETTER LUCK NEXT TIME!
340 GOTO2990
360 REM ***********************
370 REM ** NEXT LINE CHECKS IF PLAYER IS CAR
RING ANYTHING **
380 FLAG=0
390 FORJ=1TO5
400 IFP(J)<>0THENFLAG=1
410 NEXTJ
420 IFFLAG=0THEN490
425 CLS:PRINT"          ****INVENTORY****":PRI
NT
430 CASH=0
440 PRINT"YOU ARE CARRYING:"
450 FORJ=1TO5
460 IFP(J)<>0THENPRINTO$(P(J)):CASH=CASH+V(P
(J))
470 NEXT J
480 IFCASH>0THENPRINTTAB(8);"TOTAL VALUE - $
";STR$(CASH)
490 PRINT
495 PRINT:PRINT"HIT RETURN TO CONTINUE:";:IN
PUTDD$:GOTO80
500 REM **********************
510 REM ** NEXT LINES ACCEPT PLAYER INPUT **
520 KW=0:REM ** KW STANDS FOR KEYWOR - KW =
1 IF UNDERSTOOD **
540 INPUT"WHAT NOW";A$:IFA$=""THENPRINT"DONT
 JUST STAND THERE ";
550 REM ** NEXT LINES ADD SPACES IF LESS THE
N 7 LONG
560 IFA$=""THEN:PRINT"DO          SOMETHING!":
GOTO540
40570 AS=ASC(A$)
580 M=LEN(A$):IFM<7THENA$=A$+" ":GOTO580
590 REM ***********************
600 REM ** GET FIRST THREE CHARACTERS, CHEC
K IF 'HELP' OR 'QUIT'
610 B$=LEFT$(A$,3)
620 IFB$="HEL"THENPRINTTAB(4);"YOU MUST BE
JOKING!":GOTO1050
625 IFB$="INV"THENGOTO380
630 IFB$="QUI"THENQU=4:GOTO2890
640 REM ***********************
650 REM ** NOW BREAK DOWN PLAYER INPUT**
660 N=1
670 IFMID$(A$,N,1)<>" "THEN700
680 C$=MID$(A$,N+1,3):IFLEFT$(C$,1)<>" "THE
N770
690 IFLEFT$(C$,1)=" "THEN730
700 IFN<MTHENN=N+1:GOTO670
710 REM ***********************
720 REM GETS HERE IF ONLY ONE WORD ENTERED
BY PLAYER CHOSE REPLY
730 IF RND(2)=1THEN750
740 PRINT"I NEED TWO WORDS.":GOTO540
750 PRINT"TWO WORDS ARE NEEDED, NOT ONE":GO
TO540
760 REM ***********************
770 REM ** NEXT LINES UNDERSTAND PLAYER INP
UT **
820 REM ** NEXT LINE UNDERSTANDS GO/MOVE/RU
N **
830 IFB$="GO "ORB$="MOV"ORB$="RUN"THENKW=1:
GOSUB1080
840 REM ** NEXT LINE UNDERSTANDS GET/TAKE/L
IFT **
850 IFB$="GET"ORB$="TAK"ORB$="LIF"THENKW=1:
GOSUB1200
860 REM ** NEXT LINE UNDERSTANDS DROP/LEAVE
 **
870 IFB$="DRO"OR B$="LEA"THENKW=1:GOSUB1440
880 REM ADD OWN COMMANDS HERE
890 REM IFB$=...THEN GOSUB 2700
900 REM ADD OWN COMMANDS HERE
910 REM IFB$=...THEN GOSUB 2730
920 REM ADD OWN COMMANDS HERE
930 REM IFB$=...THEN GOSUB 2770
940 REM ADD OWN COMMANDS HERE
950 REM IFB$=...THEN GOSUB 2810
960 REM ADD OWN COMMANDS HERE
970 REM IFB$=...THEN GOSUB 2850
980 IFKW=1THEN1050
990 REM ***********************
1000 REM ** CHOOSE 'I DONT UNDERSTAND' MESS
AGES ***
1010 R=RND(3)
1020 IFR=1THENPRINT"IT WOULD NOT BE WISE TO
 ";A$
1030 IFR=2THENPRINT"ONLY I FOOL WOULD TRY T
O ";A$
```

```
1040 IFR=3THENPRINT"I DONT UNDERSTAND ";A$
1050 FORZ=1TO1000:NEXT
1060 GOTO80
1070 REM ***********************
1080 REM ** MOVEMENT **
1090 C$=LEFT$(C$,1)
1100 IFC$="N"ANDA(RO,1)=0,PRINT"YOU CANNOT G
O THAT WAY":RETURN
1110 IFC$="S"ANDA(RO,2)=0,PRINT"THERE IS NO
EXIT SOUTH":RETURN
1120 IFC$="E"ANDA(RO,3)=0THENPRINT"I SEE NOW
HERE TO THE EAST ";
1125 IFC$="E"ANDA(RO,3)=0THENPRINT"TO GO":RE
TURN
1130 IFC$="W"ANDA(RO,4)=0THENPRINT"WHO DO YO
U THINK YOU ARE ";
1135 IFC$="W"ANDA(RO,4)=0THENPRINT"TRYING TO
 WALK THROUGH WALLS"
1137 IFC$="W"ANDA(RO,4)=0THENRETURN
1140 IFC$="N"THENRO=A(RO,1)
1150 IFC$="S"THENRO=A(RO,2)
1160 IFC$="E"THENRO=A(RO,3)
1170 IFC$="W"THENRO=A(RO,4)
1180 RETURN
1190 ***************************
1200 REM ** GET OBJECTS ROUTINE **
1210 FLAG=0
1220 FORJ=1TO5
1230 IFP(J)<>0THENFLAG=FLAG+1
1240 NEXT J
1250 IFFLAG=5,PRINT"YOU ARE ALREADY CARRING
FIVE OBJECTS":RETURN
1260 REM ** CHECK IF ANYTHING IN ROOM IS TO
BE PICKED UP **
1270 IFA(RO,5)<>0ORA(RO,6)<>0ORA(RO,7)<>0THE
N1310
1280 PRINT"I SEE NOTHING TO PICK UP":RETURN
1290 REM ***********************
1300 REM ** NOW PICK IT UP **
1310 D$="":E$="":F$=""
1320 D$=LEFT$(O$(A(RO,5)),3)
1330 E$=LEFT$(O$(A(RO,6)),3)
1340 F$=LEFT$(O$(A(RO,7)),3)
1350 IFC$=D$THENN=A(RO,5):A(RO,5)=0:GOTO1380
1360 IFC$=E$THENN=A(RO,6):A(RO,6)=0:GOTO1380
1370 IFC$=F$THENN=A(RO,7):A(RO,7)=0
1380 J=1
1390 IFP(J)=0THENP(J)=N:GOTO1410
1400 IFJ<5THENJ=J+1:GOTO1390
1410 PRINT:PRINT"YOU NOW HAVE THE ";O$(N)
1420 RETURN
1430 REM ***********************
1440 REM DROP ROUTINE
1450 FLAG=0
1460 FORJ=1TO5
1470 IFP(J)<>0THENFLAG=1
1480 NEXT J
1490 IFFLAG=0THENPRINT"YOU ARE NOT CARRING A
NYTHING":RETURN
1500 IFA(RO,5)=0ORA(RO,6)=0ORA(R
O,7)=0THEN1520
1510 PRINT"THIS ROOM ALLREADY HOLDS ITS
MAXIMUM AMOUNT OF O";
1515 PRINT"BJECTS.":RETURN
1520 D$="":D=0
1530 FORJ=1TO8
1540 IFLEFT$(O$(J),3)=C$THEND$=O$(J):D=J
1550 NEXTJ
1560 IFD$=<>""THEN1580
1570 PRINT"HOW CAN YOU WHEN YOU DONT EVEN
HAVE IT!":RETURN
1580 FORJ=1TO5
1590 IFP(J)=DTHENP(J)=0
1600 NEXT J
1610 IFA(RO,5)=0THENA(RO,5)=D:GOTO1640
1620 IFA(RO,6)=0THENA(RO,6)=D:GOTO1640
1630 IFA(RO,7)=0THENA(RO,7)=D
1640 IFB$="DRO"THENPRINT"YOU HAVE DROPPED T
HE "D$
1642 IFB$="LEA"THENPRINT"YOU LEAVE THE "D$
1650 RETURN
1942 IFP(J)=5THENPRINT"THING OTHER THAN MON
EY":T(J)=5
2012 GOTO2170
2152 PRINT" ";O$(P(J))
2700 REM ** OWN COMMANDS ACTED ON HERE **
2710 REM ** OWN COMMANDS ACTED ON HERE **
2720 REM ** OWN COMMANDS ACTED ON HERE **
2730 REM ** OWN COMMANDS ACTED ON HERE **
2740 REM ** OWN COMMANDS ACTED ON HERE **
2750 REM ** OWN COMMANDS ACTED ON HERE **
2760 REM ** OWN COMMANDS ACTED ON HERE **
2770 REM ** OWN COMMANDS ACTED ON HERE **
2780 REM ** OWN COMMANDS ACTED ON HERE **
2790 REM ** OWN COMMANDS ACTED ON HERE **
2800 REM ** OWN COMMANDS ACTED ON HERE **
2810 REM ** OWN COMMANDS ACTED ON HERE **
2820 REM ** OWN COMMANDS ACTED ON HERE **
2830 REM ** OWN COMMANDS ACTED ON HERE **
2840 REM ** OWN COMMANDS ACTED ON HERE **
2850 REM ** OWN COMMANDS ACTED ON HERE **
2860 REM ** OWN COMMANDS ACTED ON HERE **
2870 REM ** OWN COMMANDS ACTED ON HERE **
2880 REM ***********************
2890 REM ** END OF GAME ROUTINES ***
2900 PRINT
2910 SC=0:REM SCORE
2920 REM
2930 CLS:PRINT:PRINT:PRINT"  I DID NOT IMAG
INE YOU WOULD
2940 PRINT"   TURN OUT TO BE A QUITTER!":GO
TO2990
2950 PRINT"   CONGRATULATIONS! YOU HAVE
2960 PRINT"    COMPLETED THIS ADVENTURE"
2970 SC=100
2980 REM THE SCORE IS WORKED OUT BY MONEY/M
ONSTERS KILLED/ECT.
2990 CASH=CASH+V(P(J)):SC=99*CHASH:IFRO=16T
```

```
3010 PRINT:PRINT" YOU FOUND $";CASH"WORTH"
3020 PRINT"              OF TREASURE
3030 PRINT" YOUR SCORE FOR THIS ADVENTURE"
3035 PRINT"              IS:"SC
3040 END
3050 REM *********************
3060 REM * ROOM DESCRIPTIONS *
3065 PRINT"YOU ARE ";
3066 IFRO=1THENGOSUB3090
3067 IFRO=2THENGOSUB3140
3068 IFRO=3THENGOSUB3190
3069 IFRO=4THENGOSUB3240
3070 IFRO=5THENGOSUB3290
3071 IFRO=6THENGOSUB3340
3072 IFRO=7THENGOSUB3390
3073 IFRO=8THENGOSUB3440
3074 IFRO=9THENGOSUB3490
3075 IFRO=10THENGOSUB3540
3076 IFRO=11THENGOSUB3590
3077 IFRO=12THENGOSUB3640
3078 IFRO=13THENGOSUB3690
3079 IFRO=14THENGOSUB3740
3080 IFRO=15THENGOSUB3790
3085 RETURN
3090 REM **ROOM ONE**
3100 PRINT"IN THE ROYAL GARDEN":PRINT"EXITS:
 S,"
3110 REM
3120 REM
3130 RETURN
3140 REM **ROOM TWO**
3150 PRINT"THRONE ROOM. THE THRONE IS EMPTY
EXITS: N,S,E,
3160 REM
3170 REM
3180 RETURN
3190 REM **ROOM THREE**
3200 PRINT"IN THE MAIN HALL":PRINT"EXITS: N,
S,E,W,
3210 REM
3220 REM
3230 RETURN
3240 REM **ROOM FOUR**
3250 PRINT"IN THE ROYAL VAULT, BUT THERE IS
NO MONEY TO BE SEEN.
3255 PRINT"EXITS: W,
3260 REM
3270 REM
3280 RETURN
3290 REM **ROOM FIVE**
3300 PRINT"IN THE KINGS BEDROOM":PRINT"EXITS
 N,S,
3310 REM
3320 REM
3330 RETURN
3340 REM **ROOM SIX**
3350 PRINT"ENTRY HALL":PRINT"EXITS: N,S,E,"
3360 REM
 3380 RETURN
3390 REM **ROOM SEVEN**
3400 PRINT"IN THE DRAWING ROOM":PRINT"EXITS
: W,E,"
3410 REM
3420 REM
3430 RETURN
3440 REM **ROOM EIGHT**
3450 PRINT"IN THE KITCHEN WITH A LOCKED
CUPBOARD";
3460 PRINT"EXITS: W"
3470 REM
3480 RETURN
3490 REM **ROOM NINE**
3500 PRINT"ON THE DRAWBRIDGE":PRINT"EXITS:
N,"
3510 REM
3520 REM
3530 RETURN
3540 REM **ROOM TEN**
3550 PRINT"IN THE KINGS DRESSING ROOM":PRIN
T"EXITS: N,
3560 REM
3570 REM
3580 RETURN
3590 REM **ROOM ELEVEN**
3600 PRINT"ON A BLUESTONE PATH":PRINT"TRACK
S LEAD: N,S,E,
3610 REM
3620 REM
3630 RETURN
3640 REM **ROOM TWELVE**
3650 PRINT"BETWEEN TWO LARGE WALLS":PRINT"T
RACKS LEAD: W,E,"
3660 REM
3670 REM
3680 RETURN
3690 REM **ROOM THIRTEEN**
3700 PRINT"IN AN OLD COURTYARD":PRINT"EXITS
: S,W,E"
3710 REM
3720 REM
3730 RETURN
3740 REM **ROOM FOURTEEN**
3750 PRINT"IN THE ROYAL ARMORY":PRINT" A TR
ACK LEADS WEST
3760 REM
3770 REM
3780 RETURN
3790 REM **ROOM FIFTEEN**
3800 PRINT"IN THE ROYAL MINT, NOW ":PRINT"W
HERE NO MONEY IS MADE
3805 PRINT"A TRACK LEADS NORTH"
3810 REM
3820 REM
3830 RETURN
3840 REM *********************
3850 REM ** DESCRIBE OBJECTS **
```

```
3860 REM
3870 PRINT"YOU CAN SEE: ";
3880 IFA(RO,5)<>0THENPRINTO$(A(RO,5))
3890 IFA(RO,6)<>0THENPRINTO$(A(RO,6))
3900 IFA(RO,7)<>0THENPRINTO$(A(RO,7))
3910 FORZ=1TO500:NEXTZ
3920 REM
3930 RETURN
3940 REM ***************
3950 REM ** INITIALISE **
3960 DIM A(16,8),P(5),O$(8),V(20),T(5)
3980 ST=99:REM** STARTING STRENGTH POINTS **
4040 CASH=0:REM TREASURE
4050 RO=9:REM STARTING ROOM
4060 QU=1:REM END OF GAME FLAG
4080 C$=""
4090 REM ** SET UP ROOMS **
4100 FORX=1TO16
4110 FORY=1TO4
4120 READ A(X,Y)
4130 NEXT Y
4140 NEXT X
4150 REM ** DISTRIBUTE TREASURE **
4160 FORZ=1TO8
4170 READO$(Z),V(Z)
4180 NEXT Z
4190 A(4,5)=1
4195 A(14,5)=2
4200 A(13,5)=3
4205 A(15,5)=4
4210 A(8,5)=5
4215 A(7,5)=6
4220 A(10,5)=7
4225 A(1,5)=8
4340 RETURN
4350 REM **********************
4360 REM ROOM DATA
4370 DATA0,3,0,0:REM ROOM ONE
4380 DATA16,5,3,0:REM ROOM TWO
4390 DATA 1,6,4,2:REM ROOM THREE
4400 DATA 0,0,0,3:REM ROOM FOUR
4410 DATA2,10,0,0:REM ROOM FIVE
4420 DATA3,11,7,0:REM ROOM SIX
4430 DATA 0,0,8,6:REM ROOM SEVEN
4440 DATA 0,0,0,7:REM ROOM EIGHT
4450 DATA 11,0,0,0:REM ROOM NINE
4460 DATA 5,0,0,0:REM ROOM TEN
4470 DATA 6,9,12,0:REM ROOM ELEVEN
4480 DATA 0,0,13,11:REM ROOM TWELVE
4490 DATA0,15,14,12:REM ROOM THIRTEEN
4500 DATA 0,0,0,13:REM ROOM FOURTEEN
4510 DATA 13,0,0,0:REM ROOM FIFTEEN
4520 DATA 0,2,0,0:REM ROOM SIXTEEN
4530 REM *** OBJECT DATA ***
4540 DATA "CROWN",2000
4550 DATA "SWORD",10,AXE,8
4560 DATA "COIN",2
4570 DATA "CARROT",.55
4580 DATA "KNIFE",5
4590 DATA "GOWN",40
4600 DATA "SHOVEL",5
```

# FRAGMENTED DISKS.

It appears from questions asked that disk fragmentation is not yet understood.

Remember that on a SAVE command, the computer will always use the first vacant space. So will we in this demonstration.

I have 8 weekend shacks to let. Each will hold 4 people. Jones arrives with a party of 6. Brown with 3 and cook with 4.

```
 _______________________________________
|jj_|jj_|b_c|c__|___|___|___|___|
|jj_|bb_|cc_|___|___|___|___|___|
```

Now 3 of the Jones go home, and 5 Smiths arrive
+

```
 _______________________________________
|ss_|sj_|b_c|c__|___|___|___|___|
|jj_|bb_|cc_|ss_|___|___|___|___|
```

The 3 Browns go home and 5 Wills arrive.

```
 _______________________________________
|ss_|sj_|w_c|cw_|ww_|___|___|___|
|jj_|ww_|cc_|ss_|___|___|___|___|
```

Now the 3 Jones go home and also the Cooks.

```
 _______________________________________
|ss_|s__|w__|_w_|ww_|___|___|___|
|___|ww_|___|ss_|___|___|___|___|
```

Now arrives 9 Morrises.

```
 _______________________________________
|ss_|sm_|w_m|_w_|ww_|m__|___|___|
|mm_|ww_|mm_|ss_|m_m|___|___|___|
```

This is what happens to your disk when you save delete save on and on. The computer has to look high and low for the data, and sometimes it just happens to pick up the wrong sector.

# A graphical End to Adventure Base

```
9  POKE27777,11:POKE27777,12:POKE27777,14:COLOR,0:
10 REM RELEASING A WICKED SPELL
20 MODE(1):COLOR4,0
30 FORA=1TO398   :READB,C:SET(B,C):NEXT:COPY
35 REM **DATA SECTION ONE**
40 DATA78,0,78,1,80,1,77,2,78,2,80,2,83,2,75,3,77,3,79,3,82,3
50 DATA76,4,77,4,80,4,81,4,77,5,81,5,77,6,78,6,79,6,80,6,81,6
60 DATA82,5,83,5,77,7,81,7,76,8,81,8,76,9,81,9,76,10,81,10,76,11
70 DATA80,11,75,12,80,12,75,13,80,13,74,14,79,14,74,15,79,15
80 DATA73,16,79,16
85 REM **DATA SECTION TWO**
90 DATA64,10,65,10,66,10,67,10,68,10,69,10,63,11
100 DATA64,11,65,11,70,11,63,12,70,12,63,13,65,13,68,13,70,13
110 DATA63,14,70,14,63,15,70,15,63,16,66,16,67,16,70,16,63,17
120 DATA69,17,70,17,71,17,72,17
125 REM **DATA SECTION THREE**
130 DATA73,17,78,17,64,18,65,18,66,18,67,18,68,18,73,18,76,18
140 DATA77,18,78,18,62,19,63,19,73,19,76,19,77,19,78,19,72,20
150 DATA76,20,77,20,66,21,72,21,77,21,66,22,72,22,77,22,66,23
160 DATA71,23,74,23,75,23,77,23,66,24,70,24,77,24,64,25,65,25
170 DATA67,25,68,25,69,25,72,25,73,25,74,25,75,25,77,25,62,26
180 DATA63,26,77,26,72,27,73,27,76,27,64,28,65,28,66,28,67,28
190 DATA68,28,69,28,70,28,71,28,75,28,62,29,75,29,62,30,64
200 DATA30,65,30,66,30,67,30,68,30,69,30,70,30,71,30,72,30,75,30
210 DATA74,31,65,32,66,32,67,32,68,32,69,32,70,32,71,32,72,32
220 DATA73,32,74,32,62,33,63,33,64,33,65,33,67,33,68,33,69,33,70
230 DATA33,72,33,74,33,63,34,65,34,67,34,68,34,69,34,70,34,72
240 DATA34,74,34,63,35,65,35,66,35,67,35,68,35,69,35,70,35,71,35
250 DATA72,35,73,35,74,35,62,36,63,36,64,36,74,36
255 REM **DATA SETION FOUR **
260 DATA58,19,59,19,60,19,61,19,57,20,43,21,56,21,43,22,44,22
270 DATA56,22,44,23,45,23,56,23,45,24,46,24,57,24,46,25,47,25
280 DATA57,25,47,26,48,26,57,26,48,27,49,27,56,27,49,28,50,28
290 DATA56,28,61,24,61,25,61,26,61,27,61,28,50,29,51,29,57,29
300 DATA51,30,52,30,57,30,52,31,53,31,58,31,53,32,54,32,57,32
310 DATA58,32,54,33,55,33,58,33,55,34,56,34,57,34,53,35,55,35
320 DATA56,35,53,36,54,36,57,36,58,36,53,37,58,37,59,37,60,37
330 DATA58,38,59,38,60,38,61,31,61,32,61,33,61,34,61,35,61,36
340 DATA61,37,61,38,61,39,61,40
345 REM **DATA SECTION FIVE**
350 DATA62,38,63,38,64,38,65,38,66,39,67,40,67,41,67,42,62,41
360 DATA62,42,68,42,62,43,68,43,69,43,70,43,62,44,68,44,62,45
370 DATA68,45,63,46,67,46,63,47,67,47,68,48,68,49,68,50,68,51
380 DATA68,52,63,48,63,49,63,50,63,51,63,52,64,53,68,53,64,54
390 DATA65,54,66,54,67,54,68,54,64,55,64,56,64,57,64,58,68,55
400 DATA68,56,68,57,68,58,63,59,64,59,65,59,68,59,62,60,66,60
410 DATA68,60,62,61,67,61,68,61,62,62,68,62,62,63,63,63,64,63
420 DATA65,63,66,63,67,63,68,63
425 REM **DATA SECTION SIX**
430 DATA73,37,74,37,72,38,75,38,72,39,76,39,71,40,76,40,71,41
440 DATA76,41,71,42,71,43,71,44,71,45,71,46,77,42,77,43,77,44
450 DATA77,45,77,46,72,47,72,48,72,49,72,50,72,51,78,47,78,48
460 DATA78,49,78,50,78,51,73,52,77,52,73,53,74,53,75,53,76,53
470 DATA77,53,73,54,73,55,73,56,73,57,78,54,78,55,78,56,78,57
480 DATA73,58,74,58,75,58,78,58,72,59,73,59,76,59,78,59,71,60
490 DATA77,60,78,60,71,61,78,61,71,62,72,62,73,62,74,62,75,62
500 DATA76,62,77,62,78,62
```